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Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/701,196

Applicant(s)

RAO, SUMITA

Examiner

Almis R. Jankus

Art Unit

2672

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 04 November 2003.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-36 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-36 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>9/15/05</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. Claims 1-36 are presented for examination.

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-21, 23-34 are rejected under 35 U.S.C. 103(a) as being unpatentable over Li in view of Jia et al.

With respect to claim 1, Li teaches the claimed providing a frame rule, the frame rule for instructing an image processor to generate at least a portion of a frame, at [0037] with the teaching of "The border area 216 of FIG. 2B includes four corner pieces 220 that are comprised of the same caricature of a bird. The corner pieces 220 are placed at each corner of the image 214 by the processor 102-2 executing program instructions that identify the location and orientation for each copied graphic pieces 218 & 220 according to border configuration file"; Li teaches the claimed retrieving a first frame asset, the first frame asset being indicative of a first segment of a frame at [0011] with the teaching of "The corner asset is processed into corner blocks that are placed at the corner of the image"; Li teaches the claimed generating a plurality of first frame blocks using the first frame asset, the first frame blocks being generated according to the

frame rule at [0037] with the teaching of "The border area 216 of FIG. 2B includes four corner pieces 220 that are comprised of the same caricature of a bird. The corner pieces 220 are placed at each corner of the image 214 by the processor 102-2 executing program instructions that identify the location and orientation for each copied graphic pieces 218 & 220 according to border configuration file"; li teaches the claimed placing the first frame blocks according to the frame rule, the first frame blocks positioned to form at least a portion of the frame for the image at [0037] with the teaching of "The border area 216 of FIG. 2B includes four corner pieces 220 that are comprised of the same caricature of a bird. The corner pieces 220 are placed at each corner of the image 214 by the processor 102-2 executing program instructions that identify the location and orientation for each copied graphic pieces 218 & 220 according to border configuration file".

While li teaches most features claimed, it is noted that the claimed the frame having a scalable dimension independent from the size and resolution of the image is not explicitly taught. However, Jia et al. teaches this at the Abstract with "The user has the ability to modify the rules that determine the framing scheme parameters so as to adjust the framed image if desired", and because figure 1 shows the various image sources (12a-12e), each with it's own resolution, being mapped by the image processing apparatus (10) to the various imaging devices (14a-14e), each with their own resolution, and at [0018] with "In operation, the image analyzer 20 processes a data set representing an unframed digital image 22 so as to determine one or more frame attributes of a frame 26 that is visually attractive when combined with the

unframed digital image 22. The frame attributes are provided to the framed image generator 40, which in turn processes the data set for the unframed digital image 22 in order to generate a new data set for the framed digital image 24. The new data set for the framed digital image 24 includes data representing the unframed digital image 22 surrounded by a frame 26 having the frame attributes", and at [0019] with "the digital data representing an image 22 typically is stored as a set of individual image pixels. These pixels may be logically mapped to in rows (such as exemplary rows 7) and columns (such as exemplary columns 8) of a two-dimensional image space 6 to form the image 22. Each image pixel represents the color and intensity of a small rectangular area 19 of the image 22. Typically each row and column has a pixel resolution of at least 75 to 600 or more pixels per inch. Image pixel data may be stored in a variety of different formats. A preferred format is RGB. A pixel in RGB format contains three parameters: one each for red, green, and blue colored information. The value of each of these parameters indicates the intensity of the corresponding color at that pixel. The various possible combinations of the red, green, and blue parameters allow different pixels to represent a wide range of colors and intensities. When the color and intensity of each pixel is displayed or printed in this two-dimensional image space, the image 22 is depicted", and at [0020] with "Alternatively, and with reference to FIG. 4, the image data pixels may also be logically mapped to a number of alternative three-dimensional color spaces known to those skilled in the art, such as HSL color space 50. HSL color space 8 may be represented as a cone having a central axis 52 representing lightness (L), a radial axis 54 extending out from the central axis 52 representing

saturation (S), and an angular component 56 representing the hue (H). The particular shade of color of a pixel, such as pixels 51, is represented as a position on a plane of the cone orthogonal to the lightness axis 52, while the lightness or darkness of a pixel is represented by the location on the lightness axis 52 of the plane", "arranging the pixels of the unframed image 22 in a three-dimensional color space is beneficial for automatically generating a visually pleasing frame for the image 22. While the HSL color space is depicted here for simplicity of understanding, the HSL color space is logarithmic with respect to the characteristics of human visual perception, and therefore it should be understood that the preferred color space for the present invention is CIE $L^*a^*b^*$ space which has a linear relationship to human visual perception", and at [0035] with "Some embodiments also allow the user to specify the number and width of the borders, the desired size of the framed image 26, and/or a scaled size for the representation 22' of the unframed image. After the mapping relationship has been modified, the determining 106 of frame attributes is performed again", "the user has the ability to modify or override the attributes of the frame 26", and at [0036] with "Returning now to the image processing apparatus 10 in order to consider the image analyzer 20 in further detail, and with reference to FIGS. 1 and 2, the data set for the unframed image may be supplied from image sources which include but are not limited to a mass storage device 12a, a network source 12b, a digital camera 12c, an optical scanner 12d, or the optical scanner module of a multifunction printer 12e. The image analyzer 20 further includes a component identifier 28 which processes the data set as has been previously described so as to identify one or more individual image components. The

analyzer 20 also includes a component characterizer 30 which receives the image components from the component identifier 28 and determines at least one component characteristic for certain ones of the individual image components; an image characterizer 34 which is communicatively coupled to the component characterizer 30 for determining at least one image characteristic from the at least one component characteristic as has been previously described; and an image categorizer 36 which is communicatively coupled to the image characterizer 34 for automatically defining the at least one frame attribute from the at least one image characteristic, as has also been previously described in detail. The image processing apparatus 10 also preferably includes a memory 44 accessible by the image categorizer 36, the image categorizer 36 automatically defining the at least one frame attribute in accordance with at least one framing scheme parameter stored in the memory 44. The preferred embodiment of the memory is preferably writeable, and the apparatus 10 preferably also has a user interface 38 communicatively coupled to the memory 44 for modifying the at least one framing scheme parameter", and at [0038] with "The apparatus 10 can send the data set it generates for the framed image to imaging devices that include but are not limited to a printer 14a, a display or monitor 14b, a network destination 14c, a mass storage device 14d, or a multifunction printer 14e".

It would have been obvious to one of ordinary skill in the art at the time of the instant invention to use the features of li with the teachings of Jia et al. because automatically generating a visually attractive frame around a digital image by analyzing

the contents of the digital image reduces confusion and time expended by a person to manually mat and frame the digital image.

Claim 2 further requires retrieving a second frame asset, the second frame asset being indicative of a second segment of a frame. li teaches this at [0082] with "in FIG. 2B, four graphic pieces 218 and two corner graphic pieces 220 are uniformly spaced across the width of the input image 214", and at figure 2B item 218; li teaches the claimed generating a plurality of second frame blocks using the second frame asset, the second frame blocks being generated according to the frame rule at [0037] with the teaching of "The border area 216 of FIG. 2B includes four corner pieces 220 that are comprised of the same caricature of a bird. The corner pieces 220 are placed at each corner of the image 214 by the processor 102-2 executing program instructions that identify the location and orientation for each copied graphic pieces 218 & 220 according to border configuration file";li teaches the claimed placing the second frame blocks according to the frame rule, the first frame blocks and the second frame blocks positioned to form the frame for the image at [0037] with the teaching of "The border area 216 of FIG. 2B includes four corner pieces 220 that are comprised of the same caricature of a bird. The corner pieces 220 are placed at each corner of the image 214 by the processor 102-2 executing program instructions that identify the location and orientation for each copied graphic pieces 218 & 220 according to border configuration file" and at [0082] with "in FIG. 2B, four graphic pieces 218 and two corner graphic pieces 220 are uniformly spaced across the width of the input image 214".

Claim 3 further requires accepting user input from a control. Jia et al. teaches this at [0036] with "the apparatus 10 preferably also has a user interface 38 communicatively coupled to the memory 44 for modifying the at least one framing scheme parameter"; Jia et al. teaches the claimed adjusting at least one of the first frame blocks responsive to the user input at [0035] with the teaching of "Some embodiments also allow the user to specify the number and width of the borders, the desired size of the framed image 26".

Claim 4 further requires the user input specifies a width. Jia et al. teaches this at [0035] with "Some embodiments also allow the user to specify the number and width of the borders, the desired size of the framed image 26".

Claim 5 further requires the frame extends continuously around the image. li teaches this at Figure 2B. Further, Jia et al. also teaches this at [0032] with "the pixels on the edges of the pattern are chosen so as to form visually matching interfaces when the pattern is replicated to form the border".

Claim 6 further requires at least some of the first frame blocks are positioned on the image. li teaches this at [0032] with "In FIG. 2A, a graphic piece 212 is tiled into the border area 204 by blending pixels of the graphic piece 212 into the pixels of the input image 202".

Claim 7 further requires at least some of the first frame blocks are positioned adjacent to the image. li teaches this at [0079] with "A border mask can be bigger than input image, when a border is to be added around or outside an input image. In such a case, the configuration file needs to specify the size of the input image in pixels and where the input image and border are located with respect to each other. When a border covers space outside an input image, it is preferred that the border be made up of solid color pixels".

Claim 8 further requires the first frame asset is a corner asset, and generating the first frame blocks includes rotating the corner asset. li teaches this at [0037] with "The border area 216 of FIG. 2B includes four corner pieces 220 that are comprised of the same caricature of a bird. The corner pieces 220 are placed at each corner of the image 214 by the processor 102-2 executing program instructions that identify the location and orientation for each copied graphic pieces 218 & 220 according to border configuration file".

Claim 9 further requires the first frame blocks generated using the corner asset are positioned at at least one the corner[s] of the image. li teaches this at [0037] with "The border area 216 of FIG. 2B includes four corner pieces 220 that are comprised of the same caricature of a bird. The corner pieces 220 are placed at each corner of the image 214 by the processor 102-2 executing program instructions that identify the

location and orientation for each copied graphic pieces 218 & 220 according to border configuration file”.

Claim 10 further requires the first frame asset is a tile, and the first frame blocks generated using the tile are positioned to form a portion of the frame along an edge of the image. li teaches this at [0037] with “The border area 216 of FIG. 2B includes four corner pieces 220 that are comprised of the same caricature of a bird. The corner pieces 220 are placed at each corner of the image 214 by the processor 102-2 executing program instructions that identify the location and orientation for each copied graphic pieces 218 & 220 according to border configuration file”, and at [0027] with “Instead of storing an entire border, a border can be added to an input image 202 by “tiling” the border area 204 of the image using one or more graphic “pieces,” which are stored in memory as graphic piece image files (also referred to as graphic image files). By tiling the periphery of an input image 202 with copies of one or more graphic pieces, a border can be added to an input image using only one or more relatively small graphic image files. Memory storage requirements are thereby reduced from what would be required to store an entire border. Memory storage requirements can be reduced even further if the graphic image file is represented by a paletted file”.

Claim 11 further requires the first frame asset is a graphics file. li teaches this at [0018] with “small graphics files, from which a graphic image border is “constructed,”

are stored in memory 102-4 and 102-6 and repeatedly copied around the image periphery”.

Claim 12 further requires the first frame asset is a formula. li teaches this at [0082] with “In FIG. 3C, the step of creating a mask file in step 26 is comprised of steps that include calculating the locations for each replicated graphic pieces according to configuration information contained in the border file”. Further, Jia et al. also teaches this at [0027] with “Considering now in further detail the determining 106 of frame attributes of a visually attractive frame 26 for the image 22, and with reference to Table I and FIGS. 2, 4, and 7, the frame attributes that will be determined preferentially include the number of individual borders in the frame 26 and, for each border, the border width, border color, border texture pattern, and border shading pattern. The determining 106 of frame attributes begins at 132 by examining the overall image characteristics to determine whether the image characteristics match one of the predefined image categories. If such a matching image category is found (“Yes” branch of 134), then at 136 the framing scheme associated with that image category is selected for use. If no matching image category is found (“No” branch of 134), then at 138 the framing scheme for the default image category is selected for use”, and at [0028] with “At 140, the number of borders incorporated in the frame 26, and the width of each border, are determined. The number and width of the borders are preferably determined based on the dimensions of the unframed image representation 22' (x.sub.i and y.sub.i) and the framed image 24 (x.sub.f and y.sub.f)”, and at [0029] with “If the

dimensions of the unframed representation 22' are more than about 60% of the dimensions of the framed image 24, then preferably the frame 26 will include only a single border region. Conversely, if the dimensions of the unframed representation 22' are less than about 30% of the dimensions of the framed image 24, then two or more border regions will preferably be used. As indicated in Table I, the border regions are 2-dimensional by default for all image categories".

With respect to claim 13, li teaches the claimed retrieving a corner asset, the corner asset being indicative of a corner segment of a frame, at [0037] with the teaching of "The border area 216 of FIG. 2B includes four corner pieces 220 that are comprised of the same caricature of a bird. The corner pieces 220 are placed at each corner of the image 214 by the processor 102-2 executing program instructions that identify the location and orientation for each copied graphic pieces 218 & 220 according to border configuration file"; li teaches the claimed generating four corner blocks using the corner asset, the corner blocks being generated by rotating the corner asset 0 degrees, 90 degrees, 180 degrees, and 270 degrees, respectively at [0037] with the teaching of "The border area 216 of FIG. 2B includes four corner pieces 220 that are comprised of the same caricature of a bird. The corner pieces 220 are placed at each corner of the image 214 by the processor 102-2 executing program instructions that identify the location and orientation for each copied graphic pieces 218 & 220 according to border configuration file"; li teaches the claimed placing one of the corner blocks at each corner of the image at [0037] with the teaching of "The border area 216 of FIG. 2B

includes four corner pieces 220 that are comprised of the same caricature of a bird. The corner pieces 220 are placed at each corner of the image 214 by the processor 102-2 executing program instructions that identify the location and orientation for each copied graphic pieces 218 & 220 according to border configuration file".

While li teaches most features claimed, it is noted that the claimed the frame having a scalable dimension, the scalable dimension independent from the size and resolution of the image is not explicitly taught. However, Jia et al. teaches this at the abstract with "The user has the ability to modify the rules that determine the framing scheme parameters so as to adjust the framed image if desired" and because figure 1 shows the various image sources (12a-12e), each with it's own resolution, being mapped by the image processing apparatus (10) to the various imaging devices (14a-14e), each with their own resolution, and at [0018] with "In operation, the image analyzer 20 processes a data set representing an unframed digital image 22 so as to determine one or more frame attributes of a frame 26 that is visually attractive when combined with the unframed digital image 22. The frame attributes are provided to the framed image generator 40, which in turn processes the data set for the unframed digital image 22 in order to generate a new data set for the framed digital image 24. The new data set for the framed digital image 24 includes data representing the unframed digital image 22 surrounded by a frame 26 having the frame attributes", and at [0019] with "the digital data representing an image 22 typically is stored as a set of individual image pixels. These pixels may be logically mapped to in rows (such as exemplary rows 7) and columns (such as exemplary columns 8) of a two-dimensional

image space 6 to form the image 22. Each image pixel represents the color and intensity of a small rectangular area 19 of the image 22. Typically each row and column has a pixel resolution of at least 75 to 600 or more pixels per inch. Image pixel data may be stored in a variety of different formats. A preferred format is RGB. A pixel in RGB format contains three parameters: one each for red, green, and blue colored information. The value of each of these parameters indicates the intensity of the corresponding color at that pixel. The various possible combinations of the red, green, and blue parameters allow different pixels to represent a wide range of colors and intensities. When the color and intensity of each pixel is displayed or printed in this two-dimensional image space, the image 22 is depicted", and at [0020] with "Alternatively, and with reference to FIG. 4, the image data pixels may also be logically mapped to a number of alternative three-dimensional color spaces known to those skilled in the art, such as HSL color space 50. HSL color space 8 may be represented as a cone having a central axis 52 representing lightness (L), a radial axis 54 extending out from the central axis 52 representing saturation (S), and an angular component 56 representing the hue (H). The particular shade of color of a pixel, such as pixels 51, is represented as a position on a plane of the cone orthogonal to the lightness axis 52, while the lightness or darkness of a pixel is represented by the location on the lightness axis 52 of the plane", "arranging the pixels of the unframed image 22 in a three-dimensional color space is beneficial for automatically generating a visually pleasing frame for the image 22. While the HSL color space is depicted here for simplicity of understanding, the HSL color space is logarithmic with respect to the characteristics of human visual perception,

and therefore it should be understood that the preferred color space for the present invention is CIE L*a*b* space which has a linear relationship to human visual perception", and at [0035] with "Some embodiments also allow the user to specify the number and width of the borders, the desired size of the framed image 26, and/or a scaled size for the representation 22' of the unframed image. After the mapping relationship has been modified, the determining 106 of frame attributes is performed again", "the user has the ability to modify or override the attributes of the frame 26", and at [0036] with "Returning now to the image processing apparatus 10 in order to consider the image analyzer 20 in further detail, and with reference to FIGS. 1 and 2, the data set for the unframed image may be supplied from image sources which include but are not limited to a mass storage device 12a, a network source 12b, a digital camera 12c, an optical scanner 12d, or the optical scanner module of a multifunction printer 12e. The image analyzer 20 further includes a component identifier 28 which processes the data set as has been previously described so as to identify one or more individual image components. The analyzer 20 also includes a component characterizer 30 which receives the image components from the component identifier 28 and determines at least one component characteristic for certain ones of the individual image components; an image characterizer 34 which is communicatively coupled to the component characterizer 30 for determining at least one image characteristic from the at least one component characteristic as has been previously described; and an image categorizer 36 which is communicatively coupled to the image characterizer 34 for automatically defining the at least one frame attribute from the at least one image characteristic, as

has also been previously described in detail. The image processing apparatus 10 also preferably includes a memory 44 accessible by the image categorizer 36, the image categorizer 36 automatically defining the at least one frame attribute in accordance with at least one framing scheme parameter stored in the memory 44. The preferred embodiment of the memory is preferably writeable, and the apparatus 10 preferably also has a user interface 38 communicatively coupled to the memory 44 for modifying the at least one framing scheme parameter”, and at [0038] with “The apparatus 10 can send the data set it generates for the framed image to imaging devices that include but are not limited to a printer 14a, a display or monitor 14b, a network destination 14c, a mass storage device 14d, or a multifunction printer 14e”.

It would have been obvious to one of ordinary skill in the art at the time of the instant invention to use the features of li with the teachings of Jia et al. because automatically generating a visually attractive frame around a digital image by analyzing the contents of the digital image reduces confusion and time expended by a person to manually mat and frame the digital image.

Claim 14 further requires retrieving an edge asset, the edge asset being indicative of an edge segment of the frame. li teaches this at [0082] as in FIG. 2B, graphic piece 218; li teaches the claimed generating edge frame blocks using the edge asset, the edge frame blocks being sufficient to fill between two of the corner blocks along a side of the image at [0037] with the teaching of “The border area 216 of FIG. 2B includes four corner pieces 220 that are comprised of the same caricature of a bird.

The corner pieces 220 are placed at each corner of the image 214 by the processor 102-2 executing program instructions that identify the location and orientation for each copied graphic pieces 218 & 220 according to border configuration file" and at [0082] with "in FIG. 2B, four graphic pieces 218 and two corner graphic pieces 220 are uniformly spaced across the width of the input image 214".

Claim 15 further requires generating other edge frame blocks by rotating the edge asset, the other edge frame blocks being sufficient to fill between two of the corner blocks along another side of the image. li teaches this at [0037] with "The border area 216 of FIG. 2B includes four corner pieces 220 that are comprised of the same caricature of a bird. The corner pieces 220 are placed at each corner of the image 214 by the processor 102-2 executing program instructions that identify the location and orientation for each copied graphic pieces 218 & 220 according to border configuration file", and at [0082] with "in FIG. 2B, four graphic pieces 218 and two corner graphic pieces 220 are uniformly spaced across the width of the input image 214".

Claim 16 further requires generating edge frame blocks using the corner asset, the edge frame blocks being sufficient to fill between two of the corner blocks along a side of the image. li teaches this at Figure 2A.

Claim 17 is similar to claim 1 and is rejected under rationale previously presented for similar respective features of claim 1.

Claim 18 is similar to the combination of claims 13 and 14, claim 13 being independent, with claim 14 depending from claim 13; claim 18 is rejected under rationale previously presented for similar respective features of the combination of claims 13 and 14.

Claim 19 is similar to claim 1 but further requires acquiring an image, the image having a size and a resolution. Jia et al. teaches this at Figure 2, item 22; selecting a frame style, which is taught at Jia et al. at Figure 2 item 32; retrieving a frame rule and one or more frame assets that are associated with the frame style, which is taught at Jia et al. at Figure 2, Frame Attributes from item 36; and publishing the framed image, which Jia et al. teaches at Figure 1, items 14a-14e.

Claim 20 further requires the acquiring step includes taking the image with a digital camera module. Jia et al. teaches this at Figure 1, item 12c.

Claim 21 further requires the acquiring step includes downloading the image over a wireless network. Jia et al. teaches this at Figure 1, item 12b.

Claim 23 is similar to claim 8 and is rejected under rationale previously presented for similar respective features of claim 8.

Claim 24 is similar to claim 3 and is rejected under rationale previously presented for similar respective features of claim 3.

Claim 25 is similar to claim 4 and is rejected under rationale previously presented for similar respective features of claim 4.

Claim 26 is similar to claim 7 and is rejected under rationale previously presented for similar respective features of claim 7.

Claim 27 further requires the frame is on the image, and deforms image pixels. li teaches this at [0032] with "In FIG. 2A, a graphic piece 212 is tiled into the border area 204 by blending pixels of the graphic piece 212 into the pixels of the input image 202".

Claim 28 further requires at least one of the frame assets is retrieved from a local memory. Jia et al. teaches this at Figure 1, item 44.

Claim 29 further requires at least one of the frame assets is retrieved from a remote server. Jia et al. teaches this at Figure 1 item 12b.

Claim 30 further requires at least one of the frame assets is retrieved from a remote server using a wireless network. Jia et al. teaches this at Figure 1 item 12b.

Claim 31 further requires the publishing step includes transmitting the framed image using a wireless network. Jia et al. teaches this at Figure 1 item 14c.

Claim 32 is similar to claim 3 and is rejected under rationale previously presented for similar respective features of claim 3.

Claim 33 further requires the placing step includes using an image processor to analyze the image and placing at least one of the frame blocks responsive to the analysis. Jia et al. teaches this at [0022] with "Considering now in further detail the analyzing 104 of the data set for the unframed image 22, and with reference to FIGS. 2, 3, 4, and 6, the analysis is dependent on whether the data set is analyzed in image space or in color space. If it is to be analyzed in image space 6 ("Image Space" branch of 116), then at 118 the pixels are mapped to the rows 7 and columns 8 of the image space 6. At 120, at least one spatial region of pixels, such as those mapped to regions 9a-9f, of the image space 6 are identified as image components. The image components may be located in fixed positions within the image space 6. Some embodiments may use a single image component, which may be, for example, the entire image space 6, a larger central portion 9f, or a smaller central portion 9c. Other embodiments may have a number of image components such as, for example, the five image components 9a-9e. The image components, rather than being in fixed positions in image space, may be dynamically determined based on the image being analyzed".

Claim 34 further requires the image is a picture. Jia et al. teaches this at Figure 2 item 22.

4. Claims 22, 35, and 36 are rejected under 35 U.S.C. 103(a) as being unpatentable over Li in view of Jia et al. as applied to claim 19 above, and further in view of Oberg.

Claim 22 further requires the selecting step includes previewing a thumbnail of the frame. Jia et al. teaches "At 110, it is determined whether or not the data set for the framed image 24 should be modified; usually this includes providing a visual preview of the framed image 26 to a user" at [0021], however, a thumbnail is not explicitly taught. Oberg teaches thumbnails at column 7 lines 52-58 with "The image processing software in the system is also capable of presenting multiple composite images for display simultaneously, which may make it easier for the user to compare various configurations. FIG. 4 illustrates this capability by showing a number of composite images 80 with different locations, orientations, and shapes of openings in the matting material", and at figure 4.

It would have been obvious to one of ordinary skill in the art at the time of the instant invention to use the features of Li and Jia et al. with the teachings of Oberg because it would make it easier for a user to compare various configurations and allow the user to interactively experiment with various combinations and see the composite image updated in a very short time.

Claim 35 further requires the image is a sequence forming an animation. Oberg teaches this at column 3 lines 12-17 with "Another object is to produce a video display of an object to be framed which will enable a customer to visualize various color schemes and physical dimensions of the framing and matting material items so that a decision can be made by the customer as to the most desirable arrangement of framing and matting material".

It would have been obvious to one of ordinary skill in the art at the time of the instant invention to use the features of li and Jia et al. with the teachings of Oberg because it would make it easier for a user to compare various configurations and allow the user to interactively experiment with various combinations and see the composite image updated in a very short time.

Claim 36 further requires the image is a is a sequence forming a movie. Oberg teaches this at column 3 lines 12-17 with "Another object is to produce a video display of an object to be framed which will enable a customer to visualize various color schemes and physical dimensions of the framing and matting material items so that a decision can be made by the customer as to the most desirable arrangement of framing and matting material".

It would have been obvious to one of ordinary skill in the art at the time of the instant invention to use the features of li and Jia et al. with the teachings of Oberg because it would make it easier for a user to compare various configurations and allow


the user to interactively experiment with various combinations and see the composite image updated in a very short time.

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Almis R. Jankus whose telephone number is 571-272-7643. The examiner can normally be reached on M-F, 6:30-3:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Razavi can be reached on 571-272-7664. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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AJ



ALMIS R. JANKUS
PRIMARY EXAMINER